JCSS Version 10.1
Software Release Bulletin (SRB)

August 2010

Prepared by:
Defense Information Systems Agency (DISA)

Document change history

Version Number	Date	Description
JCSS 10.1	August 2010	JCSS 10.1 SRB Update
JCSS 10.0	May 2010	JCSS 10.0 SRB Update
JCSS 10.0	March	JCSS 10.0 SRB Update
JCSS 10.0	August 2008	JCSS 10.0 SRB Update
JCSS 7.0	January, 2008	JCSS 7.0 SRB Update
NETWARS 2006-2.1	March, 2007	NETWARS 2006-2.1 Updated SRB

Disclaimer: As of October 2007, NETWARS was re-designated by the Project Manager Office as the Joint Communications Simulation System (JCSS). JCSS was selected as the new industry name to better reflect the inherent joint communication capabilities of the software. Users should be aware that no software updates were conducted as part of the software name change.

TABLE OF CONTENTS

1. INTRODUCTION TO JCSS 10.1

1.1 SRB Document Contents

This SRB includes information for both the JCSS 10.0 release and the JCSS 10.1 release. This SRB also provides an overview of some of the new features, known errors, and provides usability guidelines. The SRB gives JCSS users information on licensing agreements and points of contact.

This document contains the following:

- An overview of JCSS 10.1
- A list of JCSS contacts for questions or comments
- Additional notes on important topics relating to the use of JCSS
- Information on how to use the JCSS help desk and report problems
- A glossary of terms and acronyms used in JCSS
- A list of known issues in the current JCSS release

The JCSS Web page can be accessed at http://www.disa.mil/jcss/

For software CM support, please contact JCSS Configuration Manager via email at JCSS@disa.mil

1.2 JCSS Description

JCSS is the Joint Chiefs of Staff and DISA standard for modeling military communications networks. It is a desktop software application that provides modeling and simulation capabilities for measuring and assessing the information flow through Strategic, Operational, and Tactical military communications networks.

During the 1997 Quadrennial Defense Review (QDR), the Joint Staff discovered that the effects of improved communications on battle outcome could not be adequately represented by any of the current models. The Director for Command, Control, Communications and Computer (C4) Systems (DJ6) initiated JCSS to address this shortfall.

1.2.1 JCSS Capabilities

Enable C4 planners and analysts to

- Conduct high-level planning
- Conduct end-to-end performance assessments
- Network traffic analysis
- Evaluation of emerging technologies
- Rapid contingency planning support
- Wargaming (force-on-force) support

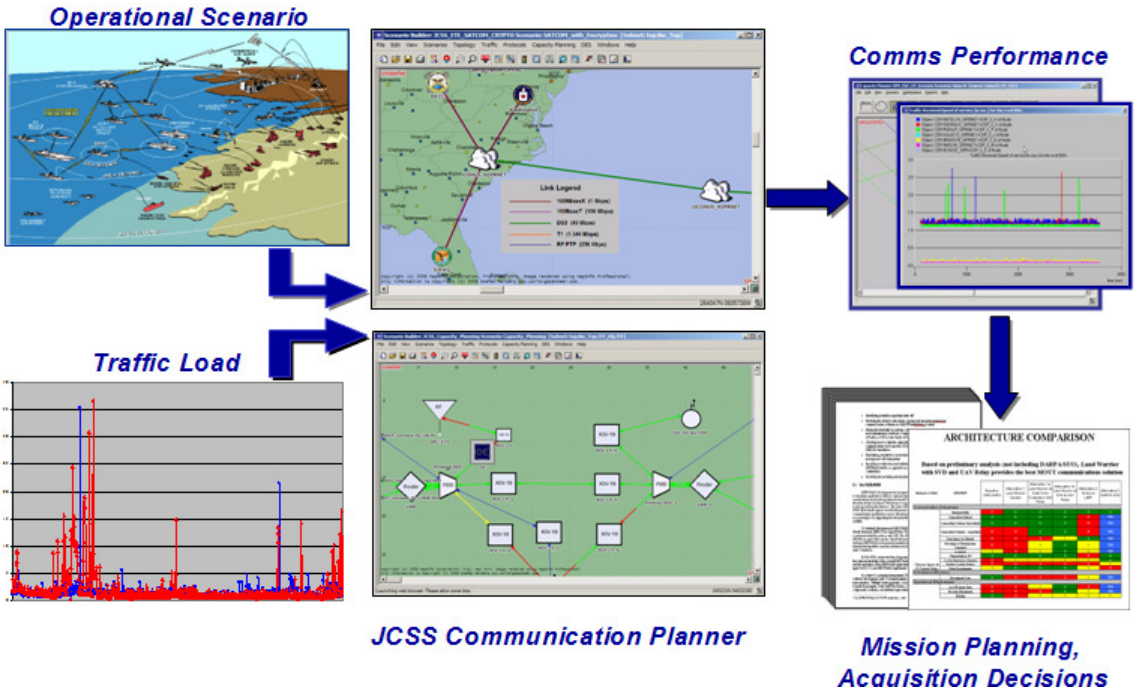
JCSS allows users to:

- Simulate realistic battlefield communication systems and networks
- Assesses communications at all levels of conflict and organizational Constructs
- Performs validation for current and future joint and service acquisitions
- Conduct network “battle drills” through the use of simulated outages and

destruction of key network nodes and/or links

- Modifications to war fighter architectures and Operations Plans (OPLAN)

Figure 1 - JCSS Functional Architecture



2. WHAT'S NEW IN JCSS 10.1

The following section provides an overview of some of the new GUI features and models introduced in JCSS 10.0 and JCSS 10.1.

2.1 What's new in JCSS 10.1

- **JCSS v10.1 is based on the latest OPNET CORE 16.0 PL1.**

- **Joint Tactical Radio System (JTRS) Waveform Translation Gateway (WTG) Model:** JCSS features several different waveforms, including SINCGARS, UHF DAMA, Link-16, Soldier Radio Waveform (SRW), and Wideband Network Waveform (WNW). The WTG serves as an intermediate device between the waveforms, allowing data traffic from one type of network to flow to another type of network. For example, the WTG allows EPLRS networks to communicate with SINCGARS networks and WNW networks can communicate with SRW networks. Note that the SRW and WNW waveforms are not shipped with JCSS. Please contact the JCSS CM for further details at JCSS@disa.mil

- **Command and Control (C2) IER Enhancement: IERs were enhanced to allow for customized movement for OPFACs.** Users can now create threads where OPFAC movement is conditional on Thread performance. IERs can now trigger OPFAC movement using the enhanced movement IERs.

- **DoDAF SV-2 Enhancements:** JCSS 10.1 introduces enhancements to SV-2, allowing users to export Capacity Planner (CP) link information in the SV-2 Visio file created by JCSS. The enhancements include link coloring to visually indicate link utilization, the ability to filter links based on link utilization, and port/link information available via Visio tool tips.

- **New EPLRS Lite and Microlite models:** Given the current physical limitations of the EPLRS Tactical radio systems, the EPLRS XF and Microlite were designed to be lightweight and more flexible versions of the EPLRS radio devices, reducing the load on the warfighter. JCSS introduces the XF and Microlite models designed to match the physical performance of the two devices. Like the EPLRS_RS device, these models only work in DES. Please refer to the EPLRS Model Userguide for more details.

- **New PRC/VRC Radio Models:** JCSS 10.1 introduces four new PRC/VRC radio devices: AN-PRC-117, AN-PRC-150, AN-PRC-152, and AN-VRC-110. Each radio device supports a unique frequency band and power output that can be customized by the user when deploying broadcast networks between the radio devices. These models support both Capacity Planner and DES.

- **Model Userguides:** JCSS v10.1 includes enhanced EPLRS, PRC, PEP, AS-SIP, WTG, DoDAF and JIPM Model Userguides along with capability scenarios.

2.2 What's new in JCSS 10.0

- **Joint IP Modem (JIPM) Model:** The Joint IP Modem or JIPM is a DoD based collection of commercial standards and specifications for an interoperable IP-based satellite modem and includes specifications for both the Network Control Center (NCC) and Remote Modem (RM) equipments. The standard is constructed on the successful European Telecommunication Standards Institute (ETSI) standards Digital Video Broadcasting - Satellite transmission 2nd generation (DVB-S2) and Digital Video Broadcasting - Return Channel via Satellite (DVB-RCS) which, together, provide a robust protocol for two-way data communication over satellite. The main architecture supported by JIPM is the Hub-and-Spoke architecture in which all communications among RMs first is sent to the NCC through the satellite. The NCC then sends the received packets again to the satellite or to its Ethernet interface depending on whether the intended destination of the packet is connected to an RM or is located on a terrestrial network. Please refer to the JIPM Model User-guide for further information.

- **Assured Services-Service Initiated Protocol (AS-SIP):** The AS-SIP signaling is based on a Department of Defense (DoD) specification defined in UCR 2008. This specification is based on the commercial standards of SIP, and adds elements that allow Assured Services Admission Control (ASAC) functions to be executed in a DoD network. Please refer to the AS-SIPModel User-guide for further information.

- **The Department of Defense (DoD) Architecture Framework (DoDAF) Enhancement:** Since DoDAF is a large standard consisting of many products, a JCSS interface to cover all of these products cannot be realized immediately. Therefore, a decision was made to initially focus on integrating a limited number of products. Products were selected based on their relationship with current JCSS features. This led to the first interface (which was developed in JCSS 9.0) for supporting DoDAF OV-3 and SV-6 products as they closely resemble the JCSS Information Exchange Requirements (IERs) workflow. For JCSS 10.0, there are a few enhancements which are proposed for OV-3/SV-6 views, as well as, new features will be added to support OV-6c/SV-10c, OV-2 and SV-2 views. Please refer to the IER Model User-guide for further information.

- **Frequency Hopping Spread Spectrum (FHSS) Enhancement:** The FHSS model will allow users to execute radio network simulations with higher fidelity modeling of physical layer effects. Thus, the simulation results will more accurately reflect radio behavior in terms of resistance to interference. The improvement in performance modeling will be captured via existing statistics such as physical layer, MAC layer, and application layer load, throughput, and delay statistics. The FHSS model was developed as a generic model capable of being incorporated into any radio model with minimal change in its code. JCSS 10.0 will incorporate this enhancement into the following radio models: PRC, EPLRS, and Link-16.

- **Circuit Import/Export Enhancement:** A user can create or modify a circuit text file in an external text editor and "merge" the information into an existing JCSS scenario. The contents of the text file will be validated based on the restrictions specified in the various circuit description XML files. Any lines that contain invalid information will not be imported. During the merge, the user will have a color-coded dialog box which shows exactly which circuits are added, deleted, or modified. For modified circuits, the user will have the option of choosing whether the new or existing circuit should be used. The feature will work very similar to the IER Report import which provides a color-coded merge dialog box. All current circuit types and future circuit types with a circuit description XML file that conforms to the current format will be supported.

- **ACE Whiteboard to IER Conversion Wizard:** The ACE/ACE Whiteboard files to IER conversion feature will allow users to import captured application traffic in ACE files and specified application traffic in ACE Whiteboard into threaded IERs through the new ACE to Threaded IERs wizard. The wizard will allow users to select the desired ACE/ACE Whiteboard files and associate each of them with the name of the application the corresponding traffic represents. The application traffic in each file will be imported as a threaded IER where each IER in the thread represents one or more application messages. Please refer to the IER Model User-guide for further information.

- **IER GUI Wizard Enhancements:** IERs were enhanced significantly in the past two releases, but most of those enhancements focused on functionality instead of usability. During the previous releases, major changes were needed to the IER architecture which made it difficult to cleanup features and make the Wizards more user-friendly. The goals of this task are to improve the current IER deployment wizard, add a new wizard to rapidly deploy large numbers of IERs, and enable recording of routes during the simulation so the routes can be displayed in the Scenario Builder. Please refer to the IER Model User-guide for further information.

- **Harris 7800w Radio Model:** The Harris 7800w radio model will enhance JCSS's capability to design and evaluate tactical wired/wireless networks. The radio model allows for establishment of high speed (Ethernet speeds) wireless connections between distributed Ethernet networks thus enabling extended LAN and WAN configurations in an all-IP architecture. Using the new radio models, users can model scenarios wherein traditional IP and Ethernet deployments are interconnected over large distances through the radio links. The simulation results allows for evaluation of the radio model and the operational scenario. Please refer to the Harris Model User-guide for further information.

- **PEP Model Enhancement:** A transport layer TCP PEP model was created for JCSS in 2006. Goals of the initial implementation were rapid development, low cost, and a medium-fidelity modeling of the effects, rather than creating a detailed high-fidelity model. The initial implementation met the stated goals, but to reduce development time and cost, the approach resulted in a number of

deficiencies which are to be corrected in the new version. Please refer to the PEP Model User-guide for further information.

2.3 JCSS 10.1 Document List

The JCSS project office develops and maintains a library of documents. These documents are intended to help the user understand what JCSS is and how they can use it. A portion of the JCSS document library is included with each release. Users can find these documents on the first installation disk under the "<Drive>:\JCSS\ Documents" folder. The following table lists the documents provided with JCSS v10.1.

Table 1– JCSS Document List

Title	Purpose	Summary of Contents
JCSS 10.1 Software Release Bulletin	Overview of the JCSS 10.1 Software Release	▫ New Features ▫ Usability Guidelines ▫ Known Errors
JCSS 10.0 User Manual	Guide to basic aspects of JCSS operation and use	▫ Topology Building ▫ Traffic Specification ▫ Capacity Planning ▫ Simulation Execution ▫ Result Analysis ▫ Glossary
JCSS 10.0 Technical Reference Manual	The JCSS Technical Reference Manual is a comprehensive reference and guide that covers all aspects of JCSS operation and use	▫ JCSS Editor Descriptions ▫ Menu Descriptions ▫ Visual examples of the JCSS interfaces ▫ Step-by-step procedures, and other important JCSS features and concepts ▫ Glossary
JCSS System Security Authorization Agreement (SSAA) (Table of Contents Only)	Current draft SSAA for your reference in preparing DITSCAP requirements for your own site. Since, the full SSAA is For Official Use Only (FOUO), only the Table of Contents in included.	▫ System Security Requirements and Appendices
JCSS 10.0 Code of Best Practices	Documents lessons learned and best practices from past studies to provide to future JCSS study teams proven processes, insights and guidelines.	▫ Guide for JCSS Study Lead ▫ Guide for JCSS User/Analyst ▫ Detailed information on JCSS capability scenarios
JCSS Model Development Guide (3.1)	Standards documents for designers and developers of communication device models.	▫ Functional overview includes. Overview of the system, technical introduction to

Title	Purpose	Summary of Contents
		JCSS modeling ▫ "Building & Testing JCSS Models" (End-System, Networking, Circuit-Switch, Radio, Link, Operational Element)
JCSS 10.0 Communications Device Model V&V Report	Results of V&V activities conducted to determine if the developed communications models meet specific documented requirements and if they reasonably represent the implicit functional performance of the actual systems.	▫ Executive Summary ▫ Model by Model Results and Recommendations for JCSS Standard Models ▫ Dynamic and Static MDG Test Results
JCSS 10.0 Capacity Planning V&V Report	Results of V&V activities conducted to determine if the developed Capacity Planner and associated features meet specific documented requirements and if they reasonably represent the performance of actual networks.	▫ Capacity Planning Overview ▫ Test Results ▫ Validation results ▫ Conclusions
JCSS 10.0 Model User-Guides (MUG's)	Detailed descriptions on many of the existing and new JCSS communication models.	▫ CTP MUG ▫ H.323 MUG ▫ EPLRS MUG (10.1 Updated) ▫ Link16 MUG (10.1 Updated) ▫ Promina MUG ▫ PEP MUG (10.1 Updated) ▫ Voice MUG ▫ UHF SATCOM MUG ▫ IER MUG (10.1 Updated) ▫ AS-SIP MUG (10.1 Updated) ▫ JIPM MUG (10.1 Updated) ▫ Harris 7800w MUG (10.1 Updated) ▫ PRC MUG (10.1 new) ▫ WTG MUG (new) ▫ DoDAF MUG (new)

2.4 Points of Contact

Table 2 – JCSS Points of Contacts

Mr. Steve Crum **JCSS Point of Contact DISA / GE344** P.O. Box 4502 Arlington, VA 22204-2364 Email: steven.crum@disa.mil Telephone: 703-681-2625
For all JCSS inquiries, including, new Software Releases, User Conference, Tech Support, please contact the JCSS CM at JCSS@disa.mil or www.disa.mil/jcss

3. KNOWN JCSS 10.1 SOFTWARE ISSUES

3.1 Critical Software Problem Reports

The following are some of the software problems that were identified during software testing and model verification. These software problems will be addressed in later version of the software.

For more information on the severity ranking of these problems, please refer to the CDM V&V. For more information on any of the problems shown below, please contact the JCSS CM at JCSS@disa.mil.

Table 3 – JCSS Known Software Problems

#	SPR ID	Description	Problem Type	Severity
1	6260	Problem: Program Abort occurs as a result of using a particular workflow to change the value of the HAIPE version parameter. Recommendation: PA can be avoided by expanding the HAIPE Parameters compound attribute rather than clicking its value to access the version attribute.	OPNET SPR	1
2	5548	Problem: IMA when closing project after manipulating bendpoints Recommendation: Save your project before modifying bendpoints in your scenario.	OPNET SPR	1
3	6714	Problem: Program Abort when Link Attributes are accessed prior to copying and pasting OPFACs. Recommendation: Copy OPFACs prior to modifying link	JCSS	1

#	SPR ID	Description	Problem Type	Severity
		attributes.		
4	6368	Problem: pulsed jammer lacks duty cycle. Recommendation: Be aware of the current impact a lack of a duty cycle has on jamming effects	OPNET SPR	2
5	6578	Problem: Duplicate IERs were imported to the IER table. Recommendation: Make sure IERs each have their own unique IDs	OPNET SPR	2
6	6591	Problem: PA when having 4 or 5 projects opened at the same time. Recommendation: Limit the number of projects open to reduce the strain on PC performance	OPNET SPR	2
7	6273	Problem: Getting attribute name error when deploying DES application demands. Recommendation: Make sure the source and destinations have unique names as DES application demands do not like same name source and destination.	OPNET SPR	2
8	6325	Problem: JCSS Licensing allows Terrain to be used in Simulation. Recommendation: Obtain a Terrain License from OPNET in order to have proper access to use the functionality.	OPNET SPR	2
9	6277	Problem: Project file gets deleted when renaming project name through Manage Scenarios. Recommendation: Save the project under a new name instead of using the manage scenario functionality.	OPNET SPR	2
10	6668	Problem: Test plan failure: 6.2.3.8.11 XDI - Incremental DCI Import * Reimport for modified devices. Recommendation: When modifying DCI files, create a new scenario and do a fresh import to prevent any issues.	OPNET SPR	2
11	6284	Problem: Configuration files information cannot be accessed from a user defined report. Recommendation:	OPNET SPR	2
12	5039	Problem: Tracer API: bpsvalue different between the sending and receiving nodes for the same tracer packet. Recommendation: User that needs access"bps" statistic should use this equation sending_packet_size = rcvd_packet_size - (rcvd_pps * 20 * 8 bits)	OPNET SPR	2
13	4934	Problem: Value not acceptable for this attribute in message log when importing flows. Recommendation: Make sure flows are configured properly when importing the flow information, otherwise errors will occur.	OPNET SPR	2
14	4633	Problem: File extensions do not change when saving different file types.	OPNET SPR	2

#	SPR ID	Description	Problem Type	Severity
		Recommendation: If the power point file contains the xml extension change it to ppt		
15	4592	Problem: Enable Reachability Analysis menu item does not work correctly in JCSS. Recommendation: Use the use the simulation level attributes.	OPNET SPR	2
16	3235	Problem: Switching between User Levels disables shortcuts for OPFAC distances feature. Recommendation: Avoid changes to user level.	OPNET SPR	2
17	1641	Problem: Pasting Link after cutting organization does not select appropriate endpoint. Recommendation: Delete and redeploy link.	OPNET SPR	2
18	1423	Problem: When changing multiple device models from network browser, link consistency check fails to pick up bad links. Recommendation: After changing devices, redeploy the links between devices to verify that the links are still valid	OPNET SPR	2
19	6717	Problem: Generate Scenario Briefing causes JCSS to not be closed properly. Recommendation: Use Task manager to close jcss.exe process after closing out of JCSS.	JCSS	2
20	4209	Problem: Saving a subordinate query locks in which units are editable. Recommendation: Make sure each subordinate has their own copy of the subordinate query to edit.	JCSS	2
21	6086	Problem: deMUX groups doesn't reset when circuit is deleted. Recommendation: Verify that the deMUX is correct after deleting and redeploying circuits	JCSS	2
22	6606	Problem: on a 64 bit machine, when running CP on a large scenario that takes few hours to run, the JCSS editor disappears. Recommendation: Make sure to save the project before running Capacity Planner. The CP results will still be preserved after running CP.	JCSS	2
23	6643	Problem: Copy/paste and then undo of IER demand working incorrectly. Recommendation: If you want to duplicate an IER, deploy a new IER, and then copy the same settings of the IER you wish to duplicate.	JCSS	2
24	6266	Problem: PA when running DES over a PSC failure recovery scenario using optimized kernel. Recommendation: Use the development kernel when wanting to run DES on PSC radios on a 64 bit system. 32	JCSS	2

#	SPR ID	Description	Problem Type	Severity
		bit systems do not see this issue.		
25	6351	Problem: XML-based Scenario Import/Export Does Not De-allocate Memory After Completion. Recommendation: If performing a lot of XML export and import, make sure to save and close JCSS to release the memory every so often.	JCSS	2
26	6658	Problem: IP and Voice logical views not working for UHF DAMA SATCOM models. Recommendation: Use the UHF DAMA filter instead of Voice and IP filter, and use the sub filters to see DATA and VOICE connections over UHF DAMA	JCSS	2
27	6636	Problem: When running scenario SCREAM-nw_scream_ip or nw_scream_atm there's a failing IER due to TCP connection being aborted. Recommendation: Use UPD traffic instead.	JCSS	2
28	6550	Problem: Memory leak when running CP evaluation. Recommendation: Make sure to save and close JCSS after running a lot of Capacity Planner to release the memory.	JCSS	2
29	6143	Problem: Throughput and utilization stats are not matching up with the expected results. Recommendation: Make sure the statistical collection method is set properly and that enough data points are captured.	JCSS	2
30	6642	Problem: Incorrect IER dialog box display for multiple copy/cut/paste of IER demands. Recommendation: After pasting and deploying the IER, verify that the pasted IER is the IER you want	JCSS	2
31	6615	Problem: JIPM: unique network names should only be allowed. Recommendation: Make sure to define unique network names for each JIPM network.	JCSS	2
32	6612	Problem: RCI Files: importing topology using RCI file is reporting error messages. Recommendation: This is caused by the files themselves not by the software. Make sure any flow information is imported with matching IPs inside the SB window.	JCSS	2
33	6602	Problem: There should be an option to delete all IERS in DoDAF editor. Recommendation: Manually delete each IER in the DoDAF view if users want to delete DoDAF IERs	JCSS	2
34	6522	Problem: Recovery on links doesn't work on scenario cesoip_fr of SCREAM tests. Recommendation: Make sure Simulation Efficiencies are	JCSS	2

#	SPR ID	Description	Problem Type	Severity
		disabled, and verify circuit performance.		
35	6501	Problem: Incorrect behavior when editing node attributes with Attribute Template. Recommendation: Modify the node attributes on the nodes themselves instead of using the template.	JCSS	2
36	6447	Problem: Wrong utilization results compared to throughput and link bandwidth, Significantly different results compared between CP and DES link utilization. Recommendation:	JCSS	2
37	6360	Problem: Moving devices with intra OPFAC links causes errors in JCSS. Recommendation: Make sure to delete and redeploy links when moving devices around between OPFACs.	JCSS	2
38	6347	Problem: Changing the type of a wireless link incorrectly sets the link frequency. Recommendation: Fix the frequency of the link	JCSS	2
39	6035	Problem: Python exception occurs on long named links when creating CP reports. Recommendation: Avoid using long link names.	JCSS	2
40	6002	Problem: Simulation Errors encountered in a scenario with several TSSP/Promina circuits. Recommendation: Be aware when configuring circuits over SATCOM, and make sure circuits are configured properly with all devices that want to communicate with each other.	JCSS	2
41	5042	Problem: cut through mechanism in DES doesn't respect link rate. Recommendation: Either cut through should be disabled in these kinds of scenarios or user should make sure that if cut through is enabled then the data rate of incoming link should be equal to data rate of outgoing link.	JCSS	2

4. LICENSING

The following three components comprise the JCSS software:

1. OPNET CORE: The following software (with related documentation), when licensed by OPNET to agencies of the U.S. Government, is licensed as "commercial computer software" pursuant to FAR § 12.212 and § 52.227-19 and DFARS §§ 227.7202-1 to 7202-4 and § 252.227-7014(a)(1):

- OPNET Netbiz
- OPNET Terrain Modeling Module

- OPNET eXpress Data Import Module

2. JCSS Enhancements: The following software is custom code developed by OPNET for the JCSS program, and is provided to agencies of the U.S. Government with unlimited rights pursuant to DFAR § 252.227-7014(b)(1):

- JCSS (NETWARS) Custom GUI Code
- JCSS (NETWARS) Custom-built models

3. Optional Components: The following optional components of JCSS are available. Note that this list is subject to change, please contact the JCSS PMO or OPNET for more details.

The following software (with related documentation), when licensed by OPNET to agencies of the U.S. Government, is licensed as "commercial computer software" pursuant to FAR § 12.212 and § 52.227-19 and DFARS §§ 227.7202-1 to 7202-4 and § 252.227-7014(a)(1):

- Simulation Runtime
- 3D Network Visualizer (3DNV)
- ACE / ACE Whiteboard
- High-Level Architecture (HLA)
- IPv6
- NetDoctor
- System in the Loop (SITL)
- TIREM
- VNE Server
- OPNET Wireless Module
- OPNET Modeler

5. TROUBLESHOOTING

The following pieces of information are suggestions and practices for troubleshooting problems with JCSS. Please review the following before sending in a problem report.

5.1 Definitions

The following section contains the definitions for error messages that are sometimes seen in JCSS.

- **Stack imbalance**: This is a memory-related error. As memory is allocated and de-allocated during the hierarchical calling of computer functions, this memory is added to and removed from the stack in a last-in/first-out basis. Therefore, the contents of memory on the stack should always be in sync with the nesting level of the code being called. When it is not, this results in a stack imbalance. This

can be due to other memory problems, such as memory allocation failures, or in some cases, programming errors. Ensuring you have sufficient memory on your computer to run the scenario can usually reduce these errors.

- **Program abort**: This is the general-purpose term for a program "crash." It can be due to any one of a number of reasons; one of the most common reasons is when memory is handled incorrectly (such as inserting an element into a list that has not been initialized) and the OPNET kernel traps that error.

- **Memory allocation failure**: This is an error that occurs when JCSS cannot obtain more memory to create space to hold additional information. This could be due to a lack of available memory on the machine or a conflict in JCSS whereby it is trying to re-use memory that is already in use by another part of the program.

5.2 Submitting Error Log files

To help the developers pinpoint the cause of various errors (especially those defined in the section above), it would be beneficial to submit your error log files along with your trouble reports.

The Error Log file is named "err_log" and is located in
<drive>:\JCSS\Scenario_Builder\op_admin

The err_log file keeps a record of all the errors encountered in JCSS. This file can grow very large over time. If the error you have found is repeatable, you can close JCSS, delete the err_log (or rename it to save it), then run JCSS and repeat your error. At this point, the err_log file will have the error you are reporting, without all the other items from previous runs. This will help reduce the clutter when you send in the err_log file (make the e-mail smaller), and give the developers a more focused look as to what the problem is. When you submit your Trouble Report (see *JCSS Help Desk and Problem Reporting*), mention that you have the corresponding err_log file along with any other information you can provide.

If you experience a program abort (crash), an exception zip file should be created <drive>:\JCSS\Scenario_Builder\op_admin. Please include this zip file with your trouble report submittal.

6. JCSS HELP DESK AND PROBLEM REPORTING

The JCSS team is using a new, automated system for reporting problems or requesting assistance. Users no longer need to fill out a paper Trouble Report Form.
There are several ways to report a problem or request assistance:

1. You can e-mail your request / problem to **jcss@opnet.com**. Your e-mail will be logged into the JCSS Technical Support Tracking System.
2. You can call: **(240) 497-3313, extension 2699**. The voice mail is checked at least once a day.

All two of these methods will result in your case being entered into the JCSS Technical Support Tracking System. Upon review, the case will be assigned to a tech support engineer who will contact you for more information, or with possible solutions.

7. ACRONYMS

AS-SIP	Assured Services-Service Initiated Protocol
ASAC	Assured Services Admission Control
C2	Command and Control
CCSD	Command Communications Service Designator.
CM	Configuration Manger
CP	Capacity Planning
DII/COE	Defense Information Infrastructure/ Common Operating Environment
DES	Discrete Event Simulation
DISA	Defense Information Systems Agency
DoDAF	DoD Architecture Framework
DVB-RCS	Digital Video Broadcasting - Return Channel via Satellite
DVB-S2	Digital Video Broadcasting - Satellite transmission 2nd generation
ETSI	European Telecommunication Standards Institute
FHSS	Frequency Hopping Spread Spectrum
IER	Information exchange requirement. An IER identifies each unique communication exchange that would normally take place during the successful accomplishment of each task that an organization could be assigned to accomplish
IER Priority	The IER priority options are Flash, Immediate, Priority, and Routine
IER Types	The IER types are Voice, Data, and Video
JCSS	Joint Communications Simulation System
JIPM	Joint IP Modem
JMTK	Joint Mapping ToolKit, the standard mapping interface used on the GCCS. This software developed by NIMA and DISA contains a variety of applications and NIMA maps data
JTRS	Joint Tactical Radio System
LOS	Line of Sight
MOE	Measure of effectiveness, a quantifiable metric that expresses the effectiveness of a system or concept under test. An MOE can also be defined as an algorithm that uses data to be collected to compute a quantity called the measure
MOP	Measure of performance, a quantitative or qualitative measure of a system's capabilities or characteristics
MSVC++	Microsoft Visual C++
NCC	Network Control Center (i.e. JIPM model)
NETWARS	Network Warfare Simulation
OPFAC	OPerational FACility, a communications node that comprises one or more types of communications devices or systems. These devices may be military or may be commercial systems used (owned or leased) by military components or agencies. OPFACs comprise system elements
OPLAN	Operations PLANs
RM	Remote Modem (i.e. JIPM model)

SDF	Simulation Description File
SRB	Software Release Bulletin
SRW	Solder Radio Waveform
TMM	Terrain Mapping Module
V&V	Verification and Validation
WTG	Waveform Translation Gateway
WIPT	Working Integration Process Team
WNW	Wideband Network Waveform